1. (AMENDED) Compounds of inhibitors of the enzymatic activity of dipeptidyl peptidase IV

(DP IV), which compounds have the general formula A-B-C, wherein

A is an amino acid

B is a chemical bond between A and C or is an amino acid, and C is an unstable inhibitor of DP IV[, namely a dipeptidyl alkyl ketone derivative, with a fluoro alkyl ketone derivative being exempted from the dipeptidyl alkyl ketone derivatives, a dipeptidyl chloroalkyl ketone, dipeptidyl cyanide or a dipeptidyl pyridinium methyl ketone radical].

- 2. (AMENDED) Compounds according to claim 1, [characterised in that] wherein B is selected from the group consisting of proline, hydroxyproline, thiazolidinecarboxylic acid, dehydroproline, pipecolic acid, azetidinecarboxylic acid or aziridinecarboxylic acid.
- 3. (AMENDED) Compounds according to claim 1 [or 2, characterised in that] wherein, B is proline or hydroxyproline.
- 4. (AMENDED) Compounds according to claim 1 [any one of the preceding claims, characterised in that] wherein said unstable inhibitor is a[the] dipeptide [group]derivative having an active carbonyl group at the C-terminus selected form the group consisting of is Ile-Thia, Ile-Pyr, Val-Thia or Val-P
- 5. (AMENDED) Compounds according to claim 1 [any one of the preceding claims, characterised in that] wherein [the] said inhibitors are present in salt form.
- 6. (AMENDED) Compounds according to claim 1 any one of the preceding claims, characterised in that the] wherein said inhibitors are present as organic salts such as acetates, succinates, tartrates or fumarates or inorganic acid radicals such as phosphates or sulphates.



- 7. (AMENDED) Compounds according to <u>claim 1</u> [any one of the preceding claims, characterised in that] <u>wherein A-B</u> is a dipeptide of formula Ile-Pro or Gly-Pro <u>and C is a dipeptidyl alkyl ketone derivative</u>.
- 8. (AMENDED) Compounds according to claim 1 wherein said compounds comprise a p[P]harmaceutical composition [especially] for oral administration, [characterised in that it comprises at least one compound according at any one of the preceding claims optionally in combination with] wherein said composition comprises customary pharmaceutical carriers or excipients.
- 9. (AMENDED) A method of preparing [Use of compounds or pharmaceutical compositions according to any one of the preceding claims in the preparation of a [medicament] pharmaceutical composition for the temporally controlled *in vivo* enzymatic inhibition of DP IV comprising providing a compound of the general formula A-B-C, wherein

A is an amino acid

B is a chemical bond between A and C or is an amino acid, and

C is an unstable inhibitor of DP IV.

- 10. (AMENDED) The method of claim 9 wherein said compound is directed to [Use of compounds or pharmaceutical compositions according to any one of claims 1 to 7 in] cell-, tissue- or organ-specific enzymatic inhibition of DP IV.
- 11. (AMENDED) A method of treating [Use of compounds or pharmaceutical compositions according to any one of claims 1 to 7 in the treatment of] disorders in mammals that can be treated by modulating the DP IV enzymatic activity of a mammal comprising the step of administering to said mammal a compound of the general formula A-B-C, wherein

A is an amino acid

B is a chemical bond between A and C or is an amino acid, and C is an unstable inhibitor of DP IV.

12. (AMENDED) The method of claim 11 wherein said compounds are used to treat[Use according to claim 10 in the treatment of] metabolic disorders in humans.

13. (AMENDED) The method of claim 11 wherein said compounds are used to treat [Use according to claim 10 in the treatment of impaired glucose tolerance, glucosuria, hyperlipidaemia, metabolic acidoses <u>obesity</u>, diabetes mellitus, diabetic neuropathy and nephropathy and sequelae of diabetes mellitus in mammals.

14. (NEWLY ADDED) A compound of claim I, wherein said unstable inhibitors are selected from a group consisting of a dipeptidyl alkyl ketone derivative, with a fluoro alkyl ketone derivative being exempted from the dipeptidyl alkyl ketone derivatives, a dipeptidyl chloroalkyl ketone, dipeptidyl cyanide or a dipeptidyl pyridinium methyl ketone radical.